

EPA's Proposal to Mitigate Acute Risk to Bees



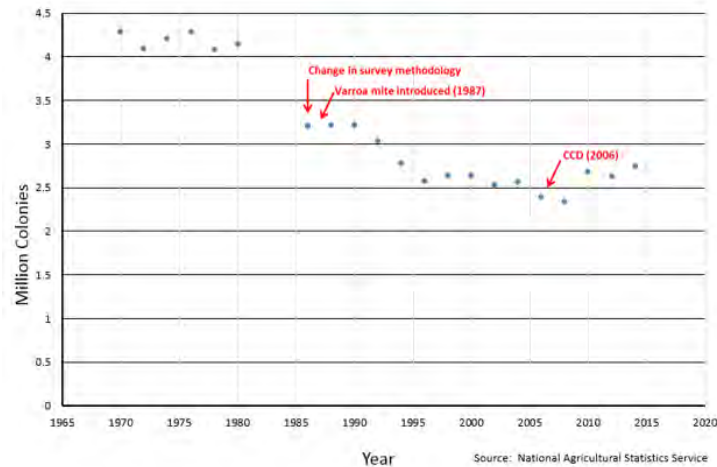
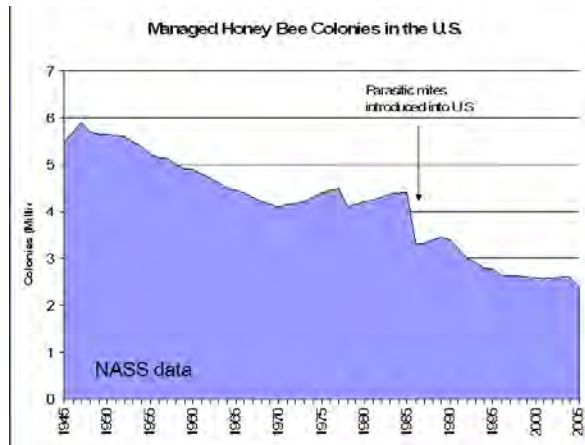
June 2015

Outline

- National Pollinator Health Strategy
- EPA's Proposal to Mitigate Acute Risk to Bees
 - Approach and rationale
 - Proposed restrictions for commercial pollination
 - State and Tribal Managed Pollinator Protection Plans (MP3s)
 - Seeking comment
 - Next steps

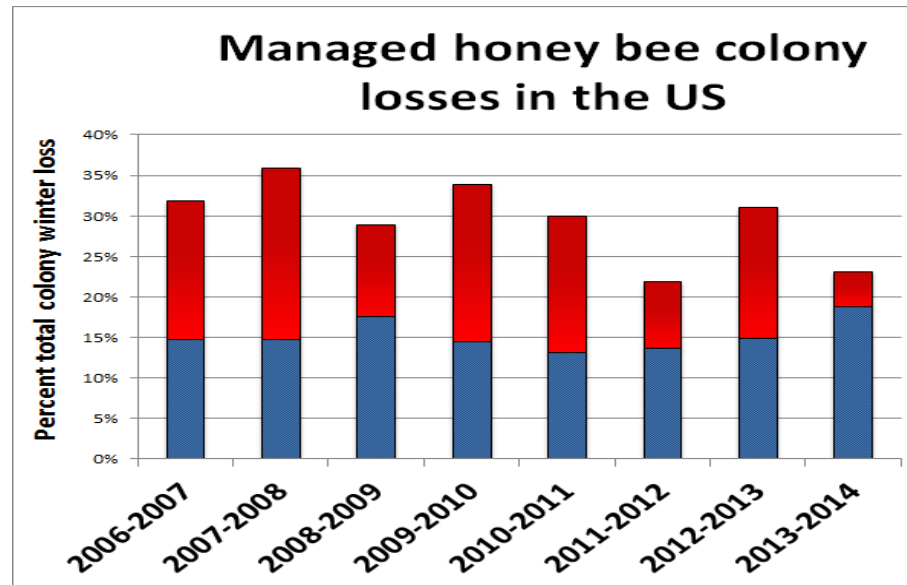
Colony Declines

- National Agricultural Statistics Survey (NASS) data indicate declines in managed honey bee colonies; peak of approximately 6 million colonies in 1947 to roughly 2.7 million in 2014 (USDA 2008).
- Change in survey methodology in mid-1990s
- Varroa mite introduction (1988) followed by decline in managed colony numbers.
- Losses have apparently leveled off since 1996.



Colony Declines

- Over-wintering losses have averaged roughly 31%
- Percentages do not account for losses occurring during the remainder of the year.



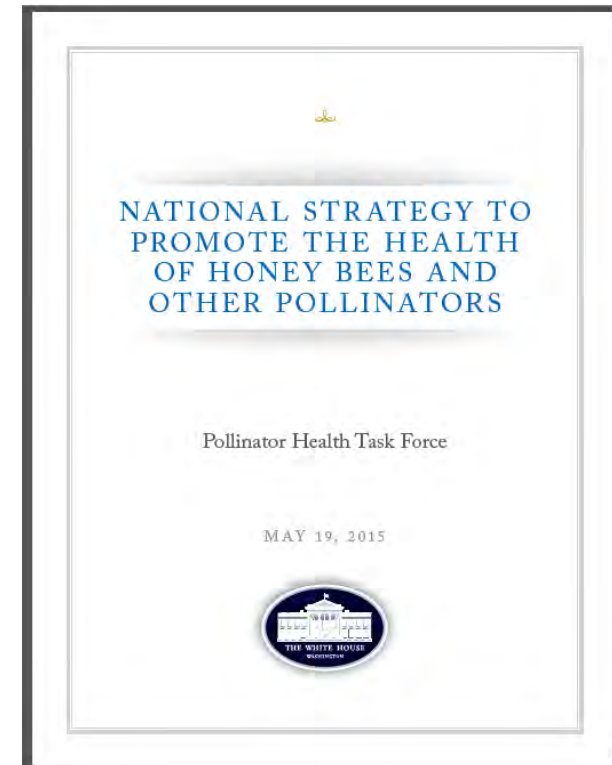
Based on USDA and Bee Informed Partnership Winter Loss Survey Data

National Strategy to Promote the Health of Honey Bees and Other Pollinators

On June 20, 2014, President Obama issued a memorandum calling on Federal agencies to increase and coordinate their efforts to improve bee health by developing an integrated strategy

The strategy was released on May 19, 2015 and incorporates and identifies:

1. Commitments from each Federal agency to promote health of honey bees and other pollinators
2. Pollinator Research Action Plan (PRAP)
3. Public Education Plan
4. Public/Private Partnerships



Strategy Overarching Goals

1. Reduce honey bee overwintering losses to no more than **15%** within **10 years**
 - Compared to current 5-yr average rate of approximately 30%
2. Restore monarch butterfly populations to **225 million** butterflies by **2020**
 - Their historical average population size
3. Restore/enhance **7 million acres** of land for pollinators over the **next 5 years**
 - Federal action and public/private partnerships

EPA Commitments

- Assess the effect of pesticides on bees and other pollinators
- **Restrict the use of products toxic to bees in crops with commercial pollination**
- **Engage State and tribal partners in the development of managed pollinator protection plans**
- Expedite review of registration applications for new products targeting pests (*e.g.*, mites) harmful to pollinators
- Encourage the incorporation of pollinator protection and habitat planting activities into green infrastructure and Superfund projects
- Enhance pollinator habitat at Federal facilities

Proposal to Mitigate Acute Risk to Bees

- Proposal was released for public comment on May 29, 2015
- 60-day comment period closes July 29, 2015
- Addresses acute contact exposure to foliar pesticide applications
- Two Mitigation Strategies
 1. Label Restrictions for Contract Pollination Services
 2. State and Tribal Managed Pollinator Protection Plans for Bee Colonies Not under Contract Pollination Services

Proposal to Mitigate Acute Risk to Bees: Approach and Rationale

- Pesticides have been identified among the factors impacting pollinator health and honey bees
- Reported bee kill incidents for pesticides categorized as toxic to bees from acute contact exposures ($LD_{50} < 11 \mu\text{g}/\text{bee}$)
- Large number of bee colonies used for commercial pollination services (*i.e.*, thousands hives potentially impacted)
- Lack of communication mechanisms between beekeepers, growers and applicators
- Focus is on managed bees, but the measures will also help protect wild bees



Proposal to Mitigate Acute Risk to Bees: Commercial Pollination

- Label restriction prohibiting applications while bees are onsite under contract for pollination services
- All FIFRA Section 3 and 24(c) products that have:
 - Liquid or dust formulations
 - Foliar use directions for crops that utilize commercial pollination
 - Acute contact toxicity $LD_{50} < 11 \mu\text{g}/\text{bee}$
- Section 18 petitions considered case-by-case



Proposed Label Restriction

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

FOR FOLIAR APPLICATIONS OF THIS PRODUCT TO SITES WITH BEES ON-SITE FOR COMMERCIAL POLLINATION SERVICES: Foliar application of this product is prohibited from onset of flowering until flowering is complete when bees are on-site under contract, unless the application is made in association with a government-declared public health response. If site-specific pollinator protection/pre-bloom restrictions exist, then those restrictions must also be followed.

Proposed Label Restriction

- Contracts will be interpreted broadly including written and oral agreements
- There are no other exceptions to the at-bloom restriction
- The restriction applies to 76 active ingredients that are toxic to bees including most insecticides and some herbicides
- Proposed mitigation is based on an acute toxicity threshold and is not intended to supersede more restrictive product-specific use prohibitions
- EPA will continue to conduct chemical-specific risk assessments for bees to address other routes of exposure and effects (seed treatments, chronic, whole hive)
- EPA will consider additional product-specific mitigation as needed in registration and registration-review

Proposal to Mitigate Acute Risk to Bees: Other Scenarios

- There is a potential for bees not under contract for pollination services to be exposed to toxic pesticides
 - Neighboring sites within the forage range or foraging on crops that don't require pollination (*e.g.*, honey production)
- Exposure is less certain than when large numbers of hives are onsite under contract for pollination services
- Wide range of local conditions suggest a flexible, localized approach rather than a singular regulatory approach
- EPA will continue to encourage state and tribal Managed Pollinator Protection Plans (MP3s)

State and Tribal Managed Pollinator Protection Plans (MP3s)

- Several states have been working through this issue at the state level by engaging stakeholders (growers, applicators and beekeepers) and developing state pollinator protection plans
 - Voluntary: California, Colorado, Florida, North Dakota, Mississippi
 - Regulatory: California, Iowa
 - About 25 other states have begun the stakeholder process
- These plans serve as examples of effective communication and collaboration between stakeholders at the local level

Engaging State and Tribal Partners on MP3s

- EPA sent letters in August 2014 to Association of American Pesticide Control Officials (AAPCO) President, State-FIFRA Issues Research and Evaluation Group (SFIREG) chair, Tribal Pesticide Program Council (TPPC) chair expressing interest working with these groups
- Discussions with TPPC has focused on options for developing MP3s and resources for Tribes
- AAPCO formed a pollinator committee
- SFIREG has issued guidance for states on the development of MP3s

SFIREG Guidance for MP3s

- Stakeholder participation process
- Method to know if managed bees are near the treatment area
- Method of communication between growers and beekeepers
- BMPs to minimize acute risk of pesticides to bees
- Clear defined plan for public outreach
- Process to review and modify plan
- Mechanism to measure effectiveness of the plan

MP3s Scope and Flexibility

- EPA is promoting MP3s generally to mitigate exposure to managed bees from acutely toxic pesticides not under contract for pollination services
- EPA is not proposing to approve MP3s and encourages states and tribes to implement quickly
- Following an MP3 does not negate label requirements
- States and tribes have flexibility:
 - adopting a regulatory or voluntary approach
 - plan may be expanded to address other pesticide-related issues (e.g., dust off from planting treated seed)
 - plan may include other factors impacting pollinator health such as access to quality foraging habitat
 - may expand scope to address wild bees and other pollinators
 - no requirement to develop a plan

Measuring the Success of MP3s

- EPA is working with AAPCO and SFIREG to develop measures for evaluating the success of pollinator protection plans
 - Earlier discussions identified potential measures for improved communication, change in behavior, reduction in exposure/risk, and overall pollinator health
- EPA will monitor the success of these plans in reducing pesticide exposure to bees in deciding whether further labels restriction are needed

Seeking Comment

- Label restriction for sites with bees under contract for pollination services
 - Other provisions or practices to address this scenario
- Reliance on state and tribal MP3s for bees not under contract for pollination services
 - Measures of success
- Uncertainties described in the proposal
 - Tank mixes, systemic pesticides, indeterminate bloom, microbial pesticides

Next Steps

- Comment period closes July 29, 2015
- EPA will review and consider comments prior to finalization
- Label changes complete in 2016
- Continue to work with states and tribes on MP3s and monitor progress

Questions or Comments?

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For more information on EPA's pollinator protection efforts, visit:

<http://www2.epa.gov/pollinator-protection/epa-actions-protect-pollinators>